



turn to the experts™

40LMA Product Data

50Hz Chilled Water Fan Coil Unit

7.3 – 26.5kW



074

Model Number Nomenclature

4	0	L	M	A	0	2	4	-	-	-	7	0	0	2	5
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UNIT SIZE															
024															
040															
060															
080															

FILTER OPTIONS															
Standard: -- without filter track media															
Special: A Half inch filter															
1 1 inch filter															

CONNECTION															
Standard: -- Left Handling (LH)															
R Right Handling (RH)															
Special: S LH + stainless steel drain pan															
T RH + stainless steel drain pan															

COIL TYPE															
Standard: -- 4 row Chilled water															
Special: 6 6 row Chilled water															
J 4R Chilled water + 1R Hot water															
K 6R Chilled water + 1R Hot water															



Fan Coil Selection Program

Please contact your Carrier's representative for a computer selection program which can help to finalize your selections, based on your "Quick Selection" plus the design parameters of your applications.

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Features & Benefits

Any room, every room flexibility in an air conditioning system..

This range of 40LMA Fan Coil Units are designed to be used with chilled and optional hot water. These units incorporate high performance qualities and versatility with space saving advantages.

The 40LMA units have a clean appearance and are designed with flexibility in mind. This allows for almost any plant room configuration or ceiling space application. A nominal cooling capacity range of 7 kW to 26 kW is available for the 40LMA units.

All units have forward curved direct drive fans. These are purposely selected to maintain the lowest possible fan outlet velocity, whilst ensuring the selection point remains in the stable operating area of the fan curve. This guarantees the customer a quiet and stable air distribution with predictable fan performance.

The standard unit is constructed from galvanized steel with 25mm polyurethane of 20kg/m³ density laminated with aluminium foil heat seal insulation. This type of insulation will protect the unit from excessive noise and thermal bridging.

Standard Features

- 4 row cooling coils.
- Direct drive fans.
- 25mm aluminium foil faced PU lining.
- Condensate drain pan of powder coated galvanized steel and insulated with PE.
- Horizontal front configuration.
- Left or right piping connection available.
- Easy access panels – maximum serviceability.

Optional Features

- 6 row cooling coils.
- Hot water coils.
- Return air filter media 12mm EU2 or 25mm EU3 with add-on frame.
- Stainless steel condensate drain pan with PE insulation.

Specifications

MODEL		40LMA024		40LMA040		40LMA060		40LMA080			
Coil	Chilled Water	Type		Copper Tube, Aluminium Fin							
		Nominal Capacity	kW	7.3	10.5	12.0	14.9	17.7	20.5	23.6	26.5
			Btu/h	24,898	35,984	40,968	50,753	60,480	70,027	80,733	90,405
		Face Area	m ²	0.19		0.29		0.33		0.43	
		No. of Rows		4	6	4	6	4	6	4	6
		Fin Type		Lanced Sine Wave Plate Fins							
	Fins/meter		472								
	Hot Water (Optional)	Type		Copper Tube, Aluminium Fin							
		Nominal Capacity	kW	10.1		17.0		21.5		28.6	
			m ²	0.19		0.29		0.33		0.43	
		No. of Rows		1							
		Fin Type		Double Wavy Plate Fins							
		Fins/meter		472							
	Air Flow Range		ℓ/s	400~500		600~800		800~1000		1000~1400	
Fan Motor	Type		Permanent Split Capacitor								
	Quantity		1								
	Power Output	watt	315		462		750		800		
	Speed		3-speed								
Power Source		V-Ph-Hz	240-1-50								
Min~Max Voltage		volt	207~253								
Connection	Supply (chilled water)		25.4mm (1")								
	Return (chilled water)		25.4mm (1")								
	Drain		19mm (3/4") male BSP								
Dimension	WxDxH	mm	754 x 600 x 425		1090 x 600 x 425		1224 x 600 x 425		1556 x 600 x 425		
Operating Weight		Kg	41.0	43.0	56.5	59.5	61.5	65.5	80.0	86.0	

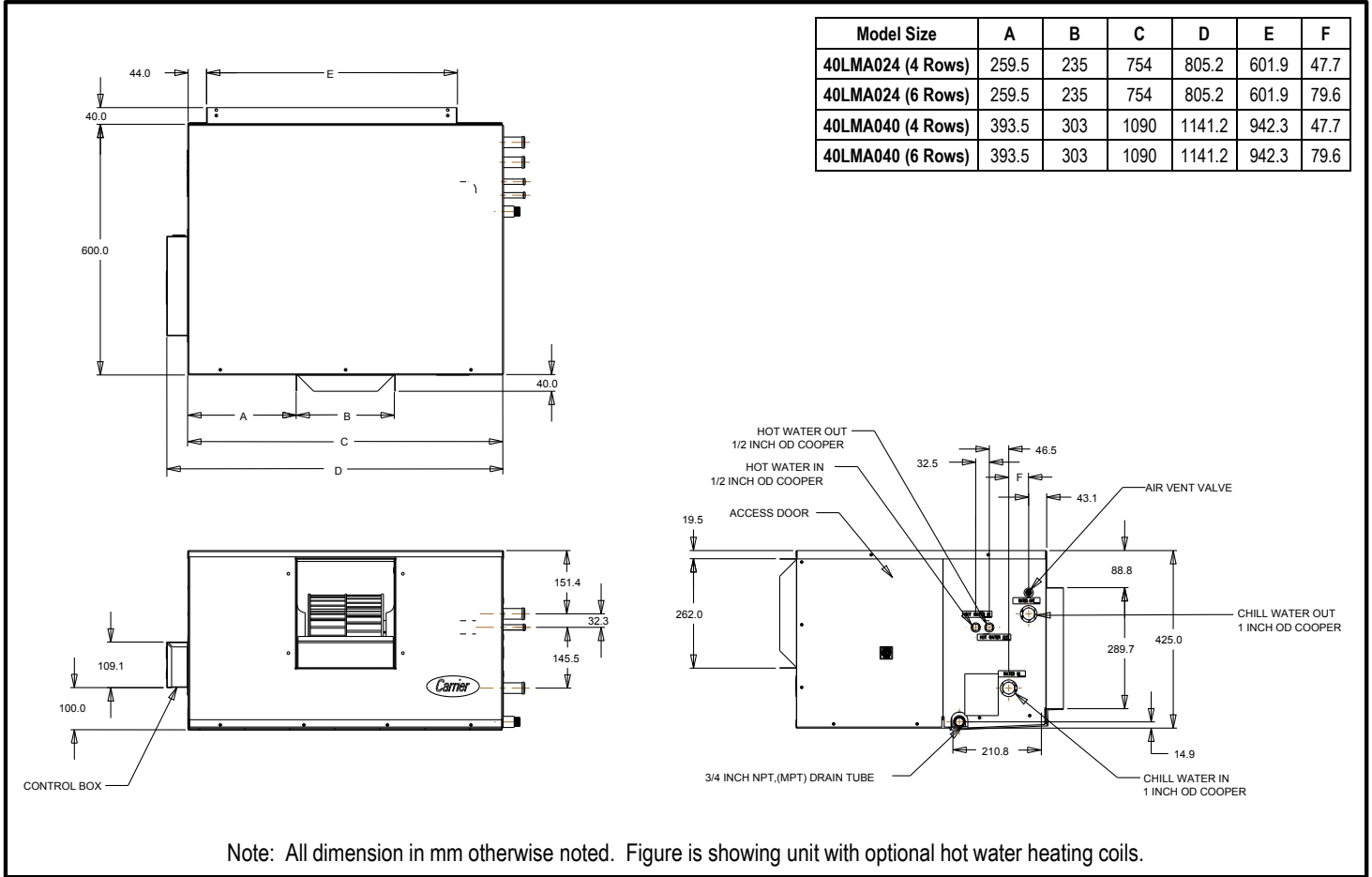


Fig. 1 40LMA024/040 (4 or 6 row) Dimensional Drawing

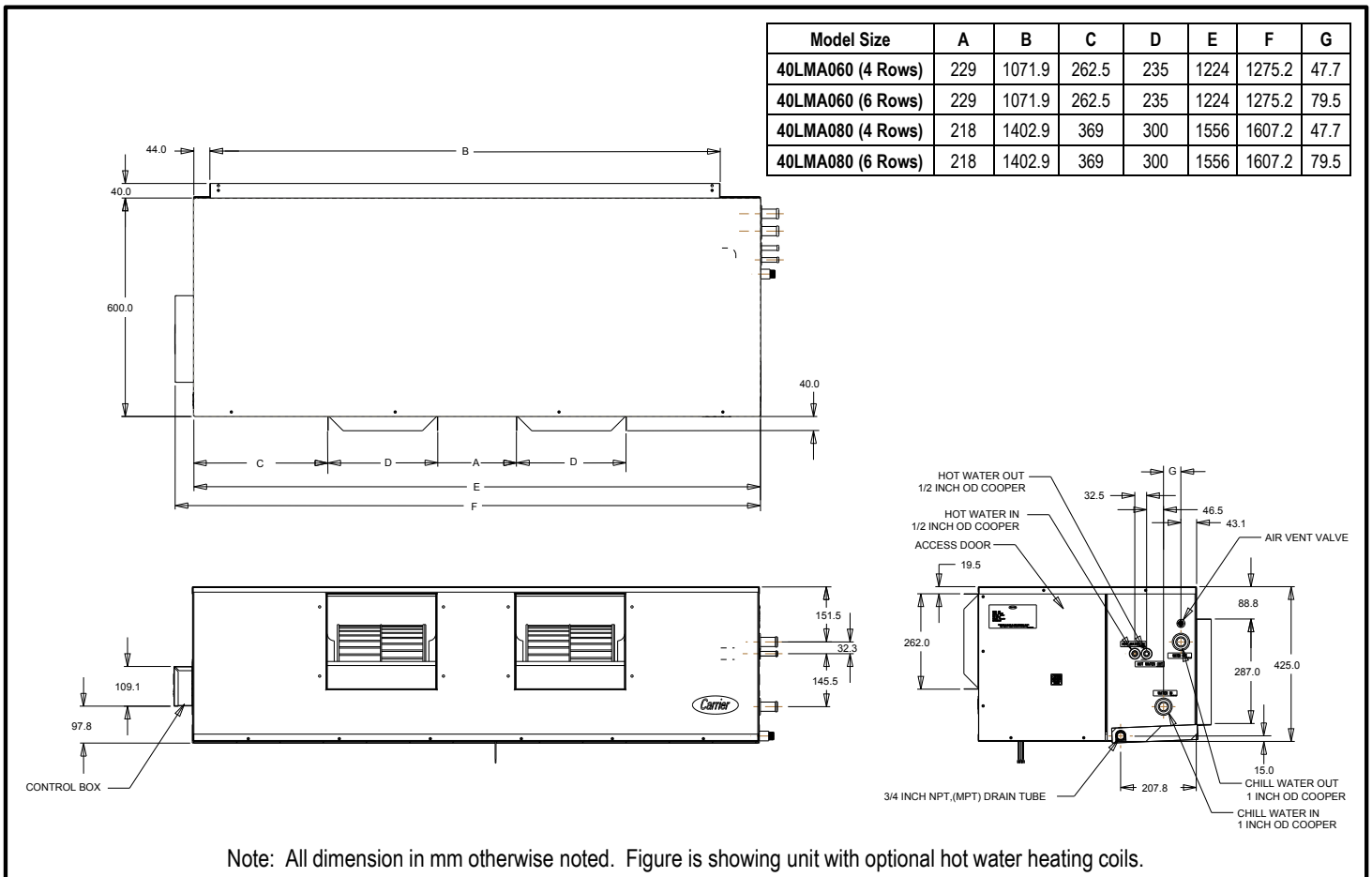
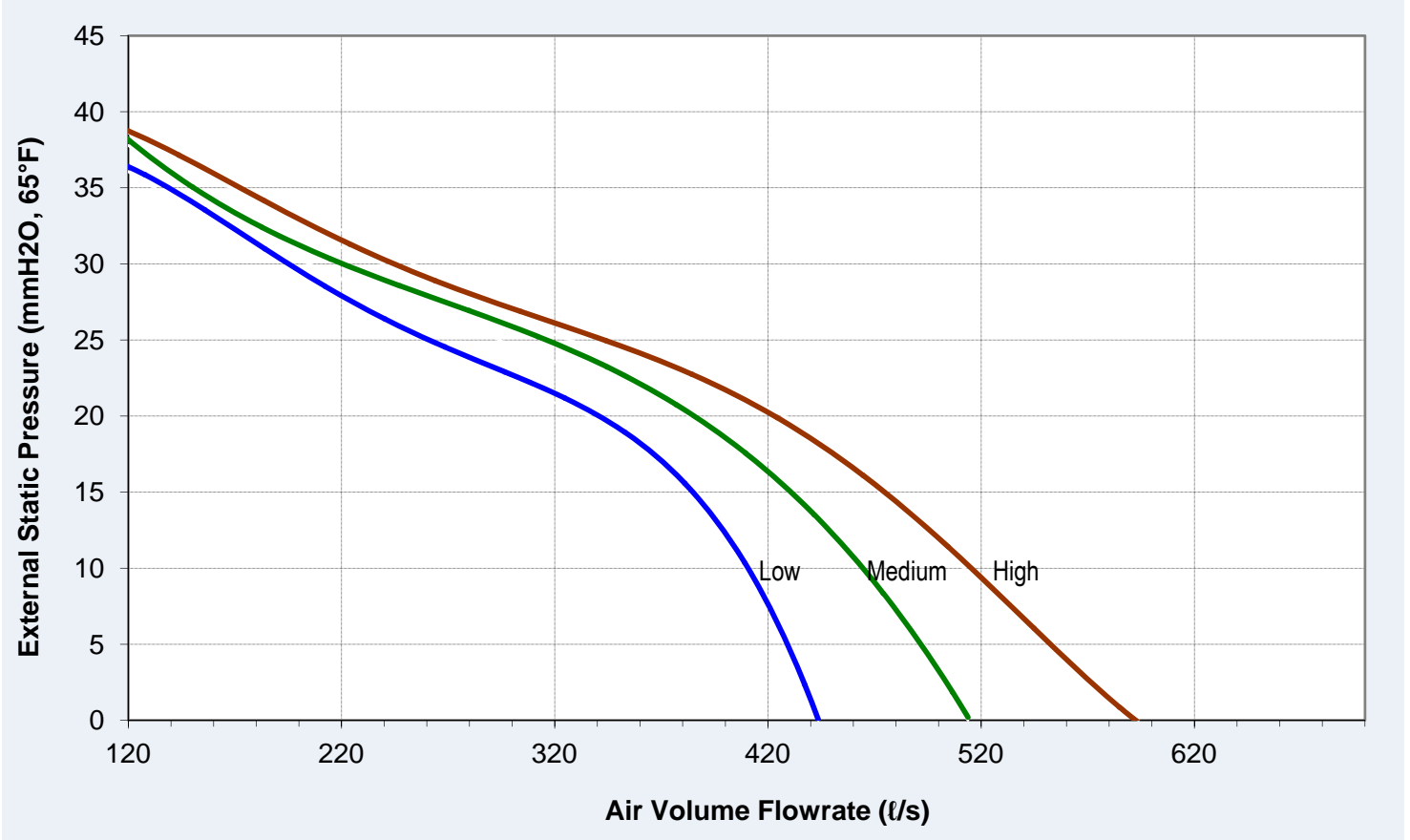


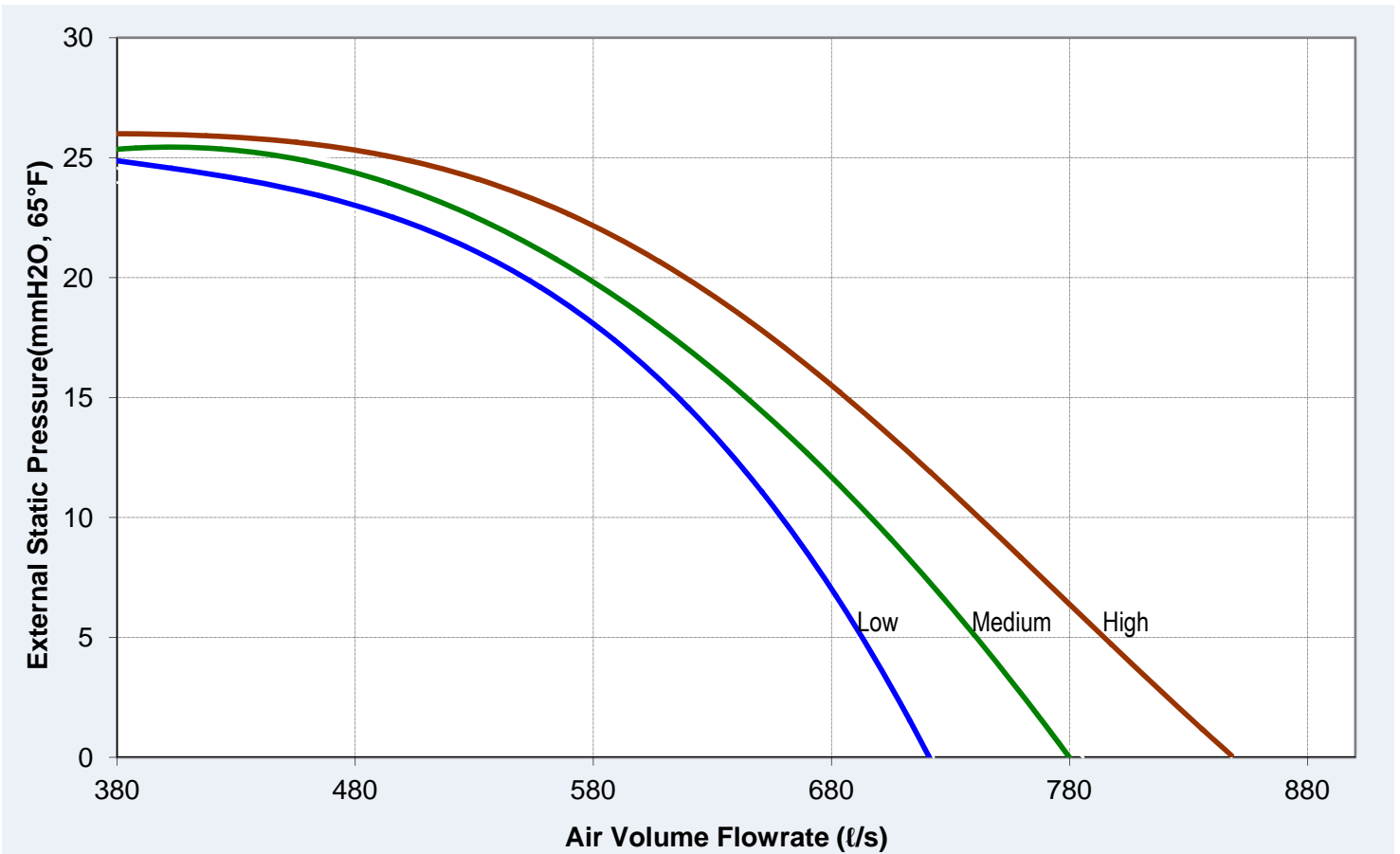
Fig. 2 40LMA060/080 (4 or 6 row) Dimensional Drawing

Fan Performance Curves
(4 Row)

40LMA024

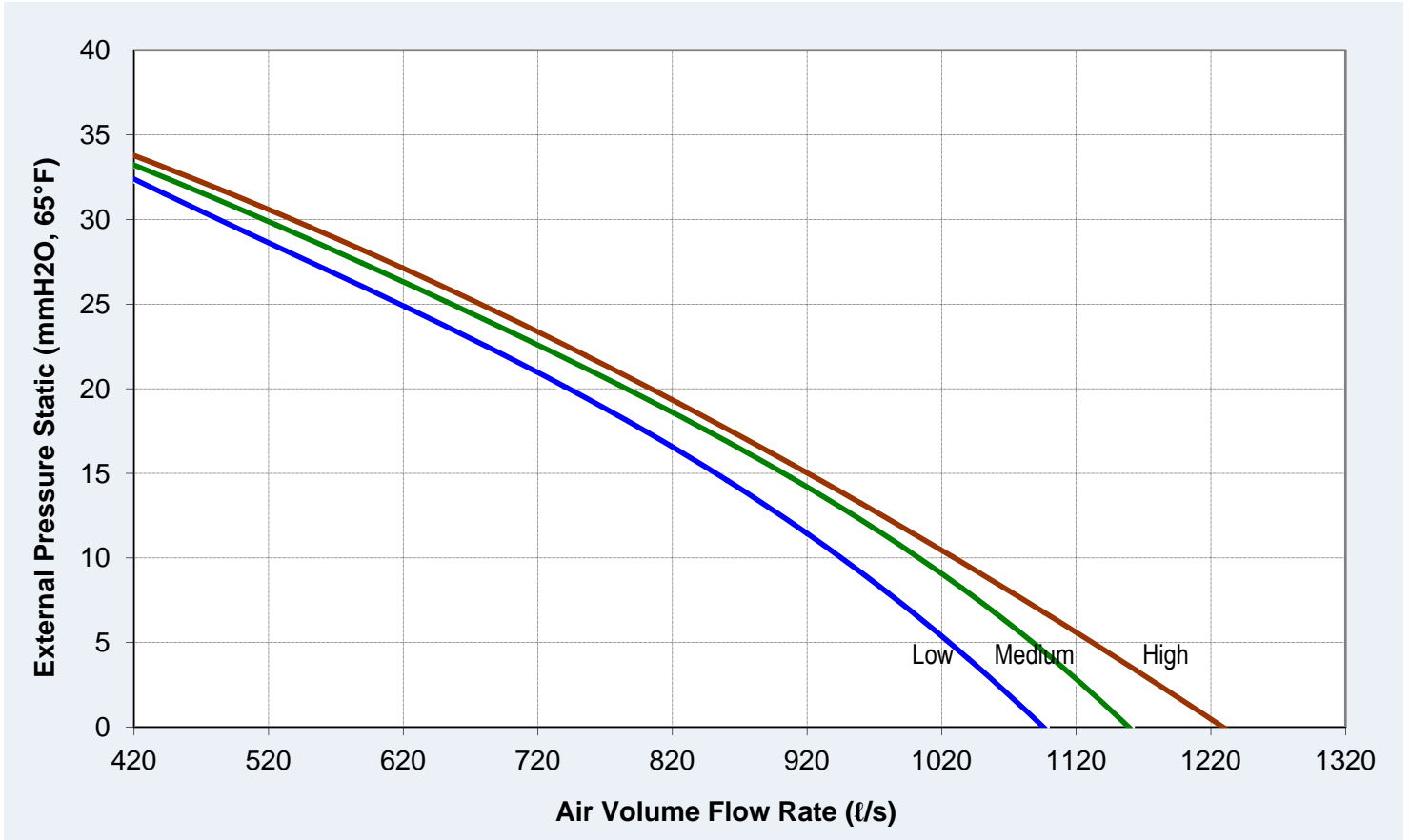


40LMA040

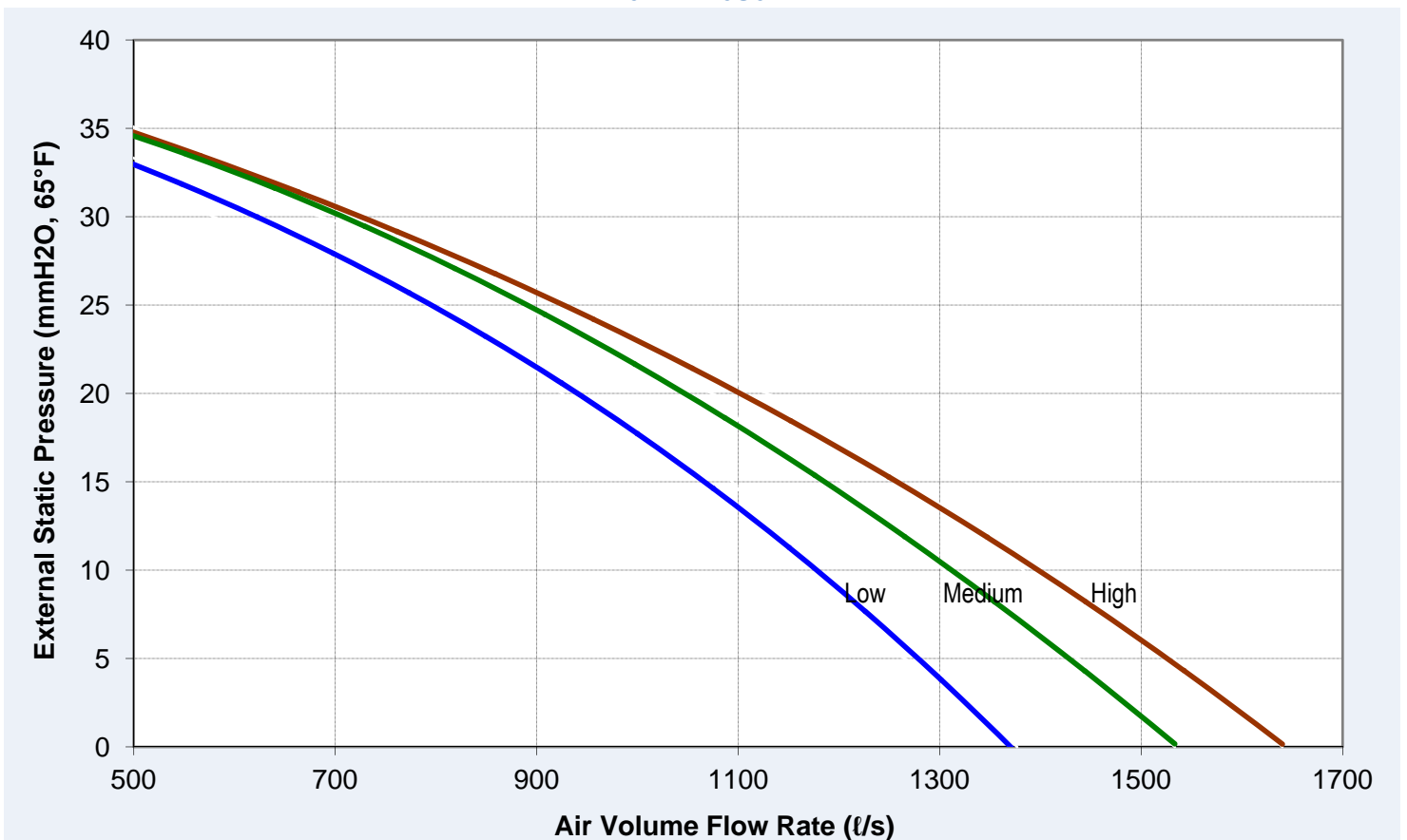


Fan Performance Curves
(4 Row)

40LMA060



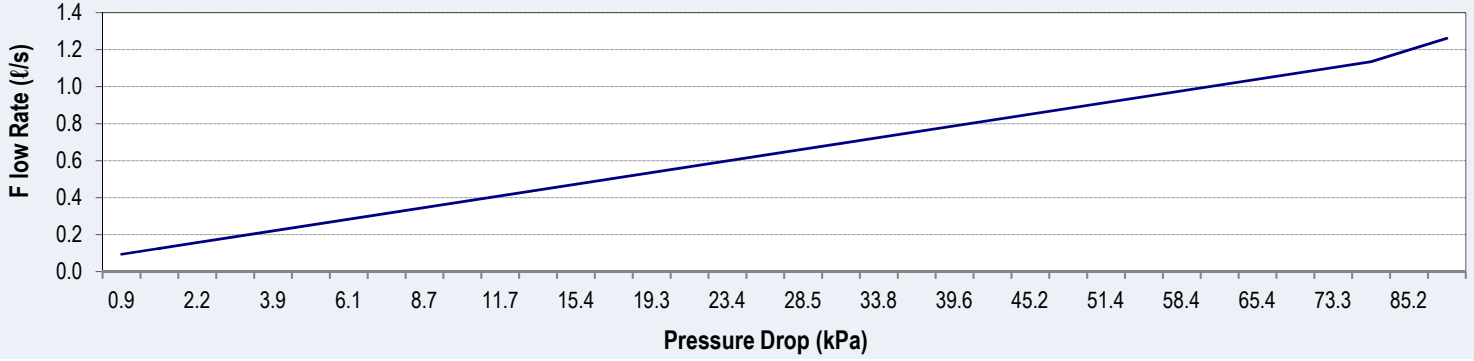
40LMA080



Coil Pressure Drop (4 Row)

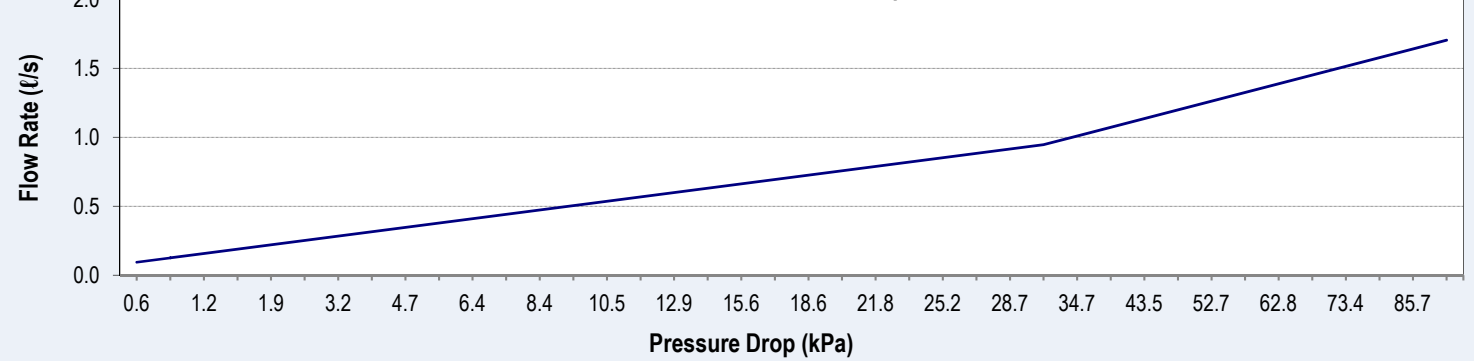
40LMA024

Water Flow Rate vs Pressure Drop



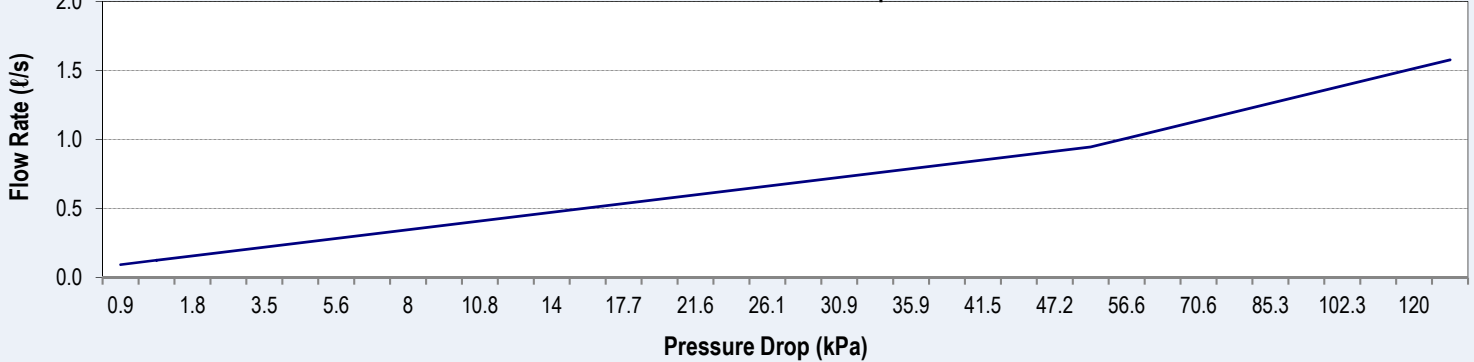
40LMA040

Water Flow Rate vs Pressure Drop



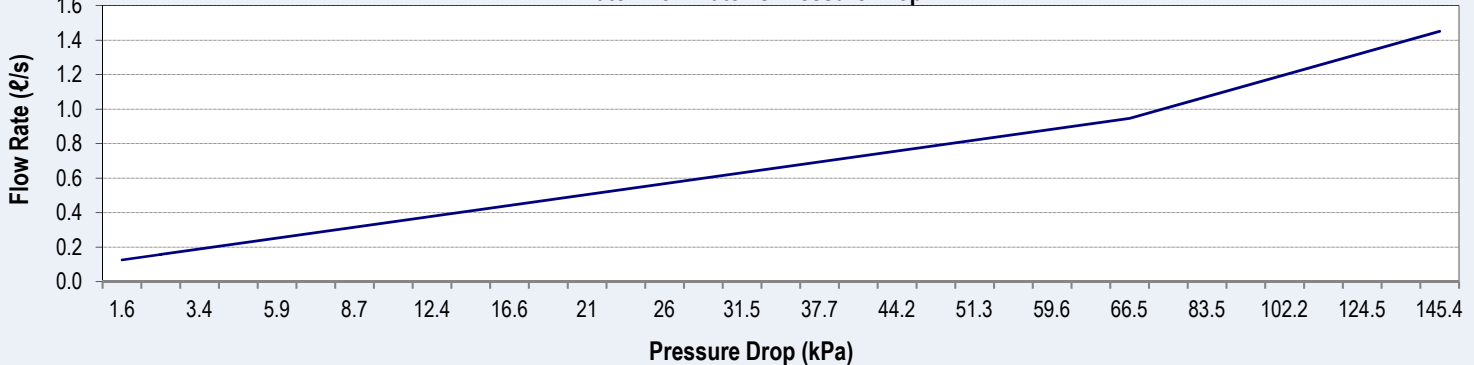
40LMA060

Water Flow Rate vs Pressure Drop



40LMA080

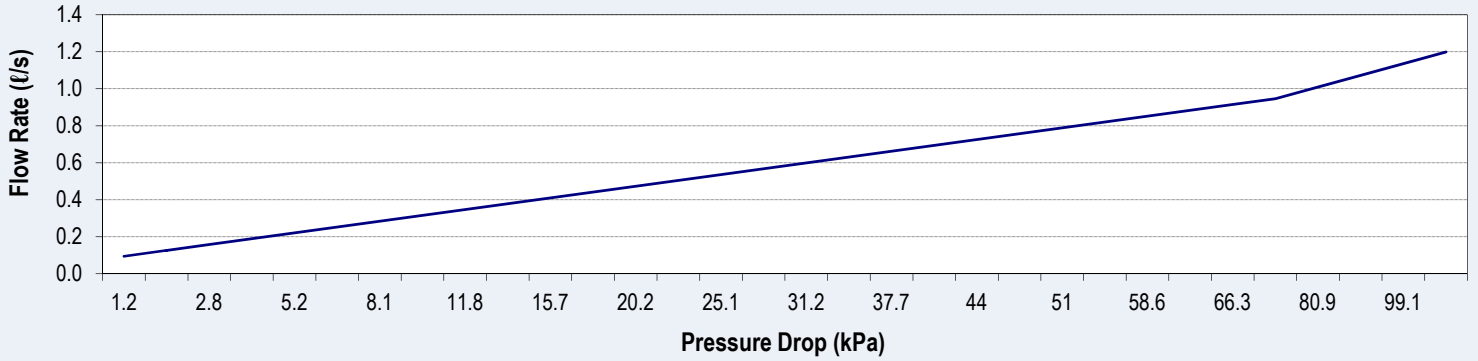
Water Flow Rate vs Pressure Drop



Coil Pressure Drop (6 Row)

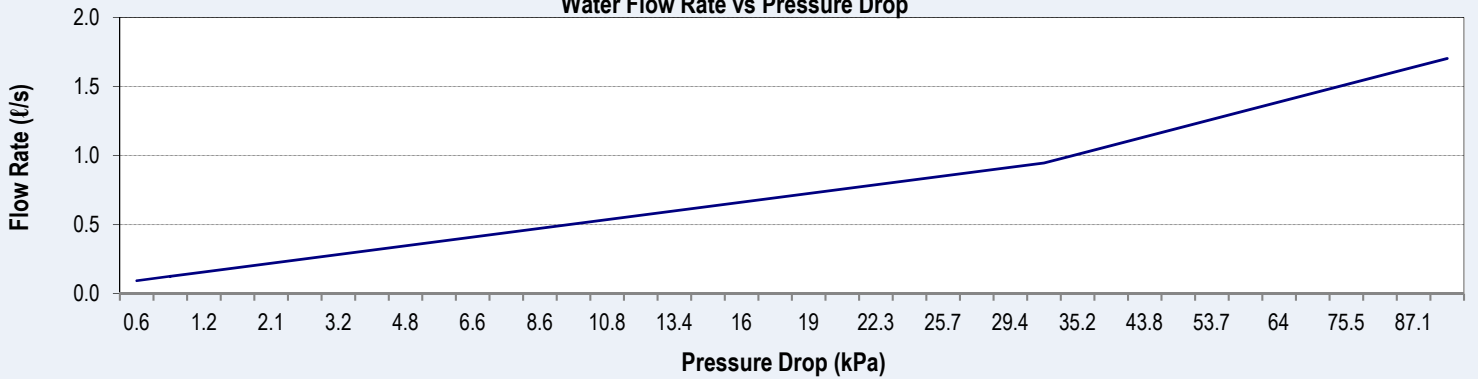
40LMA024

Water Flow Rate vs Pressure Drop



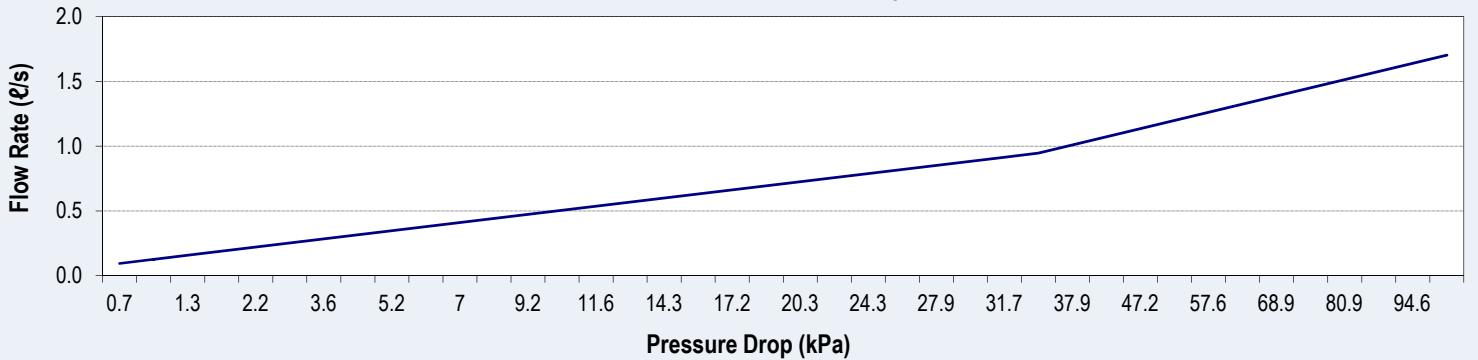
40LMA040

Water Flow Rate vs Pressure Drop



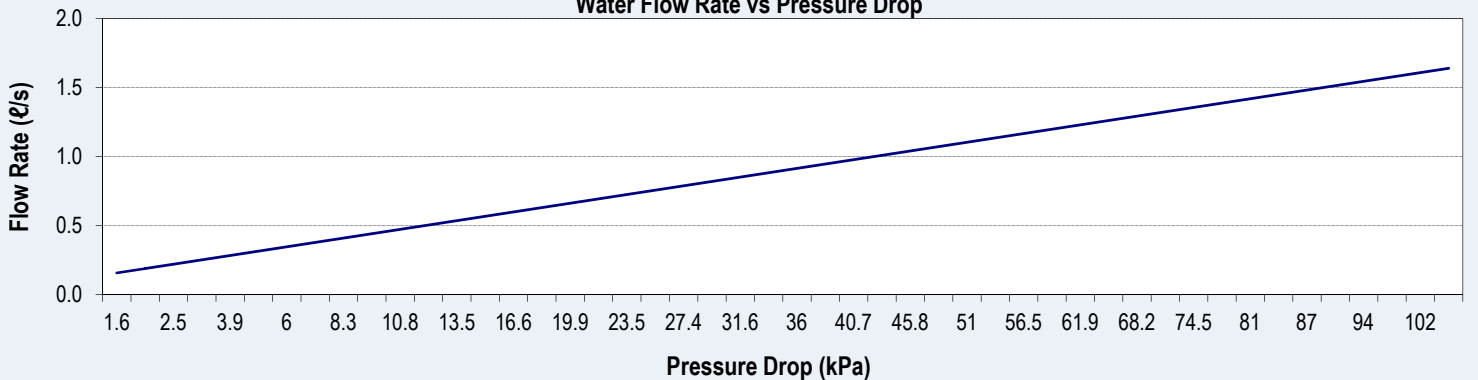
40LMA060

Water Flow Rate vs Pressure Drop



40LMA080

Water Flow Rate vs Pressure Drop



**Chilled Water Coils
(4 Row)**

40LMA024

Entering Water Temp.	Air Flow	ℓ/s	400				450				500			
	Entering Air Temperature													
	Dry Bulb	°C	21	23	25	27	21	23	25	27	21	23	25	27
	Wet Bulb	°C	16	17	18	19	16	17	18	19	16	17	18	19
5	Total Capacity	kW	5.29	6.48	7.75	8.81	5.58	6.82	8.17	9.26	5.95	7.28	8.69	9.84
	Sensible Heat Capacity	kW	4.34	5.21	6.30	6.18	4.61	5.53	6.68	6.55	4.95	5.94	7.17	7.02
	Pressure Drop	kPa	3.90	5.40	7.30	10.10	4.31	6.31	8.83	11.00	4.90	7.30	9.92	12.26
	Water Flow	ℓ/s	0.23	0.28	0.33	0.38	0.24	0.29	0.35	0.40	0.26	0.31	0.37	0.42
6	Total Capacity	kW	4.53	5.69	6.96	7.91	4.77	6.00	7.35	8.32	5.10	6.40	7.84	8.84
	Sensible Heat Capacity	kW	3.98	4.84	5.93	5.80	4.22	5.14	6.30	6.15	4.54	5.53	6.77	6.60
	Pressure Drop	kPa	2.90	4.50	6.10	8.26	3.17	4.90	7.30	9.08	3.90	5.66	8.19	10.10
	Water Flow	ℓ/s	0.19	0.24	0.30	0.34	0.21	0.26	0.32	0.36	0.22	0.27	0.34	0.38
7	Total Capacity	kW	3.85	4.96	6.22	7.03	4.07	5.23	6.57	7.39	4.35	5.60	7.03	7.86
	Sensible Heat Capacity	kW	3.62	4.49	5.58	5.43	3.84	4.76	5.93	5.76	4.13	5.12	6.38	6.18
	Pressure Drop	kPa	2.30	3.47	4.99	6.21	2.82	3.80	5.86	7.38	2.90	4.76	6.81	8.18
	Water Flow	ℓ/s	0.17	0.21	0.27	0.30	0.17	0.23	0.28	0.32	0.19	0.24	0.30	0.34
8	Total Capacity	kW	3.27	4.31	5.55	6.17	3.46	4.56	5.86	6.50	3.71	4.88	6.28	6.93
	Sensible Heat Capacity	kW	3.24	4.14	5.23	5.06	3.43	4.39	5.56	5.38	3.68	4.72	5.98	5.78
	Pressure Drop	kPa	2.06	2.88	4.29	4.90	2.06	2.90	4.75	5.74	2.20	3.63	5.45	6.63
	Water Flow	ℓ/s	0.14	0.19	0.24	0.27	0.15	0.20	0.25	0.28	0.16	0.21	0.27	0.30
9	Total Capacity	kW	2.79	3.76	4.95	5.37	2.95	3.98	5.24	5.66	3.16	4.27	5.62	6.05
	Sensible Heat Capacity	kW	2.79	3.74	4.88	4.71	2.95	3.97	5.17	5.00	3.16	4.26	5.56	5.39
	Pressure Drop	kPa	1.50	2.20	3.46	4.02	1.50	2.71	3.81	4.44	1.50	2.71	4.80	5.07
	Water Flow	ℓ/s	0.12	0.16	0.21	0.23	0.13	0.17	0.23	0.24	0.14	0.18	0.24	0.26

Note: Based on chilled water temperature rise 6°C.

40LMA040

Entering Water Temp.	Air Flow	ℓ/s	600				700				800			
	Entering Air Temperature													
	Dry Bulb	°C	21	23	25	27	21	23	25	27	21	23	25	27
	Wet Bulb	°C	16	17	18	19	16	17	18	19	16	17	18	19
5	Total Capacity	kW	11.22	13.34	15.46	17.50	9.47	11.65	13.91	15.67	9.91	12.18	14.51	16.33
	Sensible Heat Capacity	kW	7.17	8.61	10.41	10.20	7.94	9.54	11.51	11.25	8.35	10.03	12.10	11.81
	Pressure Drop	kPa	5.29	7.70	11.03	13.92	6.29	9.37	12.83	15.77	6.96	10.60	14.05	17.53
	Water Flow	ℓ/s	0.37	0.46	0.55	0.62	0.41	0.50	0.60	0.67	0.51	0.60	0.70	0.79
6	Total Capacity	kW	9.70	11.79	13.96	15.91	8.15	10.21	12.49	14.06	8.53	10.69	13.07	14.66
	Sensible Heat Capacity	kW	6.56	7.99	9.80	9.57	7.27	8.86	10.86	10.56	7.65	9.33	11.42	11.09
	Pressure Drop	kPa	3.90	6.04	8.84	11.00	4.70	7.30	10.50	12.90	5.21	7.75	11.82	14.20
	Water Flow	ℓ/s	0.32	0.40	0.49	0.55	0.35	0.44	0.54	0.60	0.44	0.53	0.63	0.72
7	Total Capacity	kW	8.25	10.32	12.53	14.37	6.94	8.95	11.25	12.58	7.28	9.37	11.79	13.11
	Sensible Heat Capacity	kW	5.96	7.41	9.23	8.97	6.60	8.22	10.24	9.92	6.95	8.65	10.78	10.43
	Pressure Drop	kPa	3.05	4.70	7.30	9.05	2.19	5.50	8.76	10.59	3.90	6.28	9.40	11.80
	Water Flow	ℓ/s	0.27	0.35	0.44	0.50	0.30	0.38	0.48	0.54	0.37	0.47	0.57	0.65
8	Total Capacity	kW	6.94	8.93	11.10	12.74	5.92	7.80	10.02	11.01	6.20	8.19	10.52	11.53
	Sensible Heat Capacity	kW	5.33	6.81	8.64	8.38	5.89	7.55	9.59	9.26	6.19	7.94	10.09	9.75
	Pressure Drop	kPa	2.22	3.84	5.78	7.11	1.60	2.77	7.05	8.40	2.85	4.70	7.51	9.00
	Water Flow	ℓ/s	0.23	0.30	0.39	0.43	0.25	0.34	0.43	0.47	0.31	0.40	0.50	0.58
9	Total Capacity	kW	5.84	7.68	9.80	11.14	5.05	6.81	9.01	9.68	5.30	7.16	9.46	10.14
	Sensible Heat Capacity	kW	4.57	6.17	8.04	7.79	5.05	6.81	8.91	8.64	5.30	7.16	9.37	9.09
	Pressure Drop	kPa	1.62	2.92	4.72	5.50	1.17	2.12	5.71	6.58	2.08	3.78	6.40	7.30
	Water Flow	ℓ/s	0.20	0.27	0.35	0.38	0.22	0.29	0.39	0.42	0.27	0.35	0.44	0.51

Note: Based on chilled water temperature rise 6°C.

**Chilled Water Coils
(4 Row)**

40LMA060

Entering Water Temp.	Air Flow	ℓ/s	800				900				1000			
	Entering Air Temperature													
	Dry Bulb	°C	21	23	25	27	21	23	25	27	21	23	25	27
	Wet Bulb	°C	16	17	18	19	16	17	18	19	16	17	18	19
5	Total Capacity	kW	14.05	16.68	19.50	22.03	14.10	16.74	19.57	22.10	14.40	17.11	20.01	22.59
	Sensible Heat Capacity	kW	11.20	13.20	15.73	15.42	11.24	13.24	15.79	15.48	11.53	13.59	16.21	15.87
	Pressure Drop	kPa	22.62	30.73	40.48	50.40	22.62	30.73	40.37	50.40	23.66	31.85	41.92	52.84
	Water Flow	ℓ/s	0.60	0.72	0.84	0.95	0.61	0.72	0.84	0.95	0.62	0.73	0.86	0.97
6	Total Capacity	kW	12.22	14.80	17.63	19.87	12.25	14.85	17.69	19.93	12.53	15.18	18.09	20.37
	Sensible Heat Capacity	kW	10.33	12.33	14.87	14.50	10.37	12.38	14.93	14.56	10.64	12.70	15.33	14.93
	Pressure Drop	kPa	17.60	23.80	33.60	41.50	15.69	23.80	33.60	41.50	17.70	25.75	34.86	43.77
	Water Flow	ℓ/s	0.52	0.64	0.76	0.85	0.53	0.64	0.76	0.86	0.54	0.65	0.78	0.88
7	Total Capacity	kW	10.56	13.06	15.88	17.81	10.60	13.11	15.93	17.87	10.84	13.41	16.30	18.26
	Sensible Heat Capacity	kW	9.49	11.49	14.04	13.63	9.53	11.53	14.09	13.68	9.78	11.83	14.46	14.03
	Pressure Drop	kPa	12.38	19.64	27.79	34.04	12.11	19.50	26.71	33.94	13.78	20.58	28.86	35.90
	Water Flow	ℓ/s	0.45	0.56	0.68	0.77	0.46	0.56	0.68	0.77	0.47	0.58	0.70	0.79
8	Total Capacity	kW	9.06	11.46	14.24	15.80	9.09	11.50	14.29	15.84	9.31	11.77	14.63	16.19
	Sensible Heat Capacity	kW	8.64	10.66	13.21	12.77	8.67	10.70	13.26	12.82	8.90	10.98	13.61	13.15
	Pressure Drop	kPa	9.31	15.52	22.67	26.26	9.21	13.85	22.67	26.26	10.52	15.70	23.80	28.30
	Water Flow	ℓ/s	0.39	0.49	0.61	0.68	0.39	0.49	0.61	0.68	0.40	0.51	0.63	0.70
9	Total Capacity	kW	7.73	10.05	12.79	13.91	7.76	10.09	12.83	13.96	7.95	10.33	13.14	14.28
	Sensible Heat Capacity	kW	7.70	9.81	12.37	11.94	7.72	9.84	12.42	11.98	7.92	10.10	12.75	12.30
	Pressure Drop	kPa	6.99	11.20	18.66	21.60	6.93	10.95	16.65	21.60	7.96	12.50	19.70	22.64
	Water Flow	ℓ/s	0.33	0.43	0.55	0.60	0.33	0.43	0.55	0.60	0.34	0.44	0.57	0.61

Note: Based on chilled water temperature rise 6°C.

40LMA080

Entering Water Temp.	Air Flow	ℓ/s	1100				1250				1400			
	Entering Air Temperature													
	Dry Bulb	°C	21	23	25	27	21	23	25	27	21	23	25	27
	Wet Bulb	°C	16	17	18	19	16	17	18	19	16	17	18	19
5	Total Capacity	kW	18.29	21.48	24.85	28.26	18.92	22.22	25.72	29.23	19.89	23.38	27.09	30.75
	Sensible Heat Capacity	kW	13.95	16.32	19.31	19.08	14.50	16.96	20.09	19.82	15.36	17.98	21.31	20.99
	Pressure Drop	kPa	47.50	63.20	83.50	102.20	50.47	66.50	89.07	112.50	56.17	75.10	98.11	112.50
	Water Flow	ℓ/s	0.79	0.92	1.07	1.21	0.81	0.95	1.10	1.25	0.85	1.00	1.16	1.32
6	Total Capacity	kW	15.95	19.15	22.53	25.61	16.49	19.80	23.31	26.47	17.35	20.82	24.54	27.83
	Sensible Heat Capacity	kW	12.87	15.26	18.27	17.95	13.38	15.86	19.00	18.65	14.18	16.82	20.16	19.76
	Pressure Drop	kPa	36.47	51.30	68.23	85.33	39.86	54.70	71.83	93.00	43.43	59.60	81.94	102.20
	Water Flow	ℓ/s	0.69	0.82	0.97	1.10	0.71	0.85	1.00	1.14	0.75	0.89	1.05	1.20
7	Total Capacity	kW	13.78	16.84	20.22	22.94	14.26	17.42	20.93	23.71	15.01	18.34	22.04	24.91
	Sensible Heat Capacity	kW	11.83	14.20	17.21	16.82	12.30	14.77	17.91	17.48	13.05	15.66	19.00	18.52
	Pressure Drop	kPa	27.79	40.90	56.06	69.88	30.72	43.11	59.06	75.10	33.53	47.50	66.50	83.50
	Water Flow	ℓ/s	0.59	0.72	0.87	0.99	0.61	0.75	0.90	1.02	0.65	0.79	0.95	1.07
8	Total Capacity	kW	11.78	14.78	18.14	20.42	12.19	15.30	18.79	21.12	12.85	16.12	19.82	22.21
	Sensible Heat Capacity	kW	10.84	13.20	16.21	15.75	11.27	13.74	16.87	16.38	11.95	14.58	17.92	17.38
	Pressure Drop	kPa	21.00	31.50	46.28	59.60	21.89	34.50	48.89	59.53	24.75	37.70	54.70	66.86
	Water Flow	ℓ/s	0.51	0.64	0.78	0.88	0.52	0.66	0.81	0.91	0.55	0.69	0.85	0.96
9	Total Capacity	kW	10.07	12.86	16.15	17.96	10.44	13.33	16.75	18.57	11.01	14.08	17.68	19.52
	Sensible Heat Capacity	kW	9.82	12.20	15.22	14.71	10.20	12.69	15.84	15.31	10.81	13.46	16.82	16.23
	Pressure Drop	kPa	15.90	24.31	37.70	45.09	16.60	26.00	40.90	47.50	18.80	29.70	44.20	52.20
	Water Flow	ℓ/s	0.43	0.55	0.69	0.77	0.45	0.57	0.72	0.80	0.47	0.61	0.76	0.84

Note: Based on chilled water temperature rise 6°C.

Performance Data

Chilled Water Coils (6 Row)

40LMA024

Entering Water Temp.	Air Flow	ℓ/s	400				450				500			
	Entering Air Temperature													
	Dry Bulb	°C	21	23	25	27	21	23	25	27	21	23	25	27
	Wet Bulb	°C	16	17	18	19	16	17	18	19	16	17	18	19
5	Total Capacity	kW	7.73	9.12	10.51	11.89	8.42	9.91	11.45	12.95	8.93	10.51	12.15	13.74
	Sensible heat Capacity	kW	5.61	6.57	7.75	7.70	6.16	7.21	8.52	8.44	6.58	7.70	9.10	9.01
	Pressure Drop	kPa	10.34	15.22	17.60	22.90	12.79	16.41	21.99	26.16	14.50	19.23	24.22	29.90
	Water Flow	ℓ/s	0.33	0.39	0.45	0.51	0.36	0.43	0.49	0.56	0.38	0.45	0.52	0.59
6	Total Capacity	kW	6.69	8.10	9.52	10.82	7.30	8.81	10.36	11.77	7.76	9.34	11.00	12.49
	Sensible heat Capacity	kW	5.13	6.11	7.30	7.22	5.65	6.71	8.02	7.92	6.05	7.18	8.58	8.46
	Pressure Drop	kPa	7.80	11.18	16.30	19.27	9.85	13.70	17.60	22.90	11.06	15.54	20.20	25.10
	Water Flow	ℓ/s	0.29	0.35	0.41	0.46	0.31	0.38	0.45	0.51	0.33	0.40	0.47	0.54
7	Total Capacity	kW	5.70	7.10	8.56	9.77	6.22	7.75	9.32	10.62	6.62	8.23	9.89	11.25
	Sensible heat Capacity	kW	4.69	5.66	6.87	6.76	5.16	6.24	7.56	7.42	5.53	6.68	8.09	7.93
	Pressure Drop	kPa	5.70	8.78	12.15	16.92	7.61	11.09	14.52	18.99	8.10	12.06	17.06	20.86
	Water Flow	ℓ/s	0.25	0.31	0.37	0.42	0.27	0.33	0.40	0.46	0.28	0.35	0.43	0.48
8	Total Capacity	kW	4.81	6.14	7.61	8.69	5.25	6.71	8.30	9.43	5.60	7.15	8.82	10.00
	Sensible heat Capacity	kW	4.28	5.24	6.45	6.31	4.71	5.78	7.11	6.93	5.05	6.19	7.61	7.40
	Pressure Drop	kPa	4.07	6.60	9.90	13.70	5.20	8.10	12.21	14.72	5.82	9.43	13.87	17.23
	Water Flow	ℓ/s	0.21	0.26	0.33	0.37	0.23	0.29	0.36	0.41	0.24	0.31	0.38	0.43
9	Total Capacity	kW	4.04	5.28	6.73	7.63	4.42	5.79	7.36	8.30	4.72	6.17	7.84	8.80
	Sensible heat Capacity	kW	3.88	4.84	6.06	5.87	4.27	5.34	6.68	6.46	4.57	5.73	7.16	6.91
	Pressure Drop	kPa	2.89	4.91	7.90	9.82	3.90	6.60	9.90	12.11	4.16	7.06	10.94	13.70
	Water Flow	ℓ/s	0.17	0.23	0.29	0.33	0.19	0.25	0.32	0.36	0.20	0.27	0.34	0.38

Note: Based on chilled water temperature rise 6°C.

40LMA040

Entering Water Temp.	Air Flow	ℓ/s	600				700				800			
	Entering Air Temperature													
	Dry Bulb	°C	21	23	25	27	21	23	25	27	21	23	25	27
	Wet Bulb	°C	16	17	18	19	16	17	18	19	16	17	18	19
5	Total Capacity	kW	11.20	13.20	15.73	15.42	11.82	14.05	16.27	18.41	11.97	14.22	16.47	18.63
	Sensible Heat Capacity	kW	14.05	16.68	19.50	22.03	8.64	10.18	12.04	11.95	8.76	10.32	12.20	12.10
	Pressure Drop	kPa	22.62	30.73	40.48	50.40	10.84	14.60	17.70	22.30	9.78	13.77	18.25	22.60
	Water Flow	ℓ/s	0.60	0.72	0.84	0.95	0.51	0.60	0.70	0.79	0.51	0.61	0.71	0.80
6	Total Capacity	kW	10.33	12.33	14.87	14.50	10.22	12.42	14.70	16.73	10.35	12.58	14.89	16.93
	Sensible Heat Capacity	kW	12.22	14.80	17.63	19.87	7.92	9.44	11.33	11.20	8.03	9.57	11.48	11.35
	Pressure Drop	kPa	17.60	23.80	33.60	41.50	7.50	12.00	14.60	18.75	7.50	10.80	14.51	19.00
	Water Flow	ℓ/s	0.52	0.64	0.76	0.85	0.44	0.53	0.63	0.72	0.44	0.54	0.64	0.73
7	Total Capacity	kW	9.49	11.49	14.04	13.63	8.69	10.88	13.21	15.10	8.80	11.01	13.38	15.28
	Sensible Heat Capacity	kW	10.56	13.06	15.88	17.81	7.23	8.76	10.66	10.49	7.33	8.88	10.81	10.63
	Pressure Drop	kPa	12.38	19.64	27.79	34.04	6.24	9.62	12.23	15.30	5.70	8.60	12.20	15.77
	Water Flow	ℓ/s	0.45	0.56	0.68	0.77	0.37	0.47	0.57	0.65	0.38	0.47	0.57	0.66
8	Total Capacity	kW	8.64	10.66	13.21	12.77	7.32	9.41	11.72	13.40	7.42	9.53	11.86	13.52
	Sensible Heat Capacity	kW	9.06	11.46	14.24	15.80	6.59	8.10	10.00	9.78	6.68	8.22	10.14	9.90
	Pressure Drop	kPa	9.31	15.52	22.67	26.26	4.80	7.34	9.70	13.81	4.00	6.60	9.70	12.10
	Water Flow	ℓ/s	0.39	0.49	0.61	0.68	0.31	0.40	0.50	0.58	0.32	0.41	0.51	0.58
9	Total Capacity	kW	7.70	9.81	12.37	11.94	6.17	8.10	10.33	11.74	6.25	8.21	10.47	11.88
	Sensible Heat Capacity	kW	7.73	10.05	12.79	13.91	5.98	7.49	9.38	9.10	6.06	7.60	9.52	9.22
	Pressure Drop	kPa	6.99	11.20	18.66	21.60	4.00	5.33	8.30	9.82	2.85	4.97	7.78	9.66
	Water Flow	ℓ/s	0.33	0.43	0.55	0.60	0.27	0.35	0.44	0.51	0.27	0.35	0.45	0.51

Note: Based on chilled water temperature rise 6°C.

**Chilled Water Coils
(6 Row)**

40LMA060

Entering Water Temp.	Air Flow	ℓ/s	800				900				1000			
	Entering Air Temperature													
	Dry Bulb	°C	21	23	25	27	21	23	25	27	21	23	25	27
	Wet Bulb	°C	16	17	18	19	16	17	18	19	16	17	18	19
5	Total Capacity	kW	15.43	18.11	20.88	23.61	16.18	19.00	21.93	24.80	16.96	19.95	23.04	26.05
	Sensible heat Capacity	kW	11.24	13.13	15.48	15.36	11.85	13.86	16.35	16.20	12.51	14.63	17.28	17.10
	Pressure Drop	kPa	17.20	24.01	30.76	37.90	18.90	26.10	33.70	41.74	20.30	27.90	36.76	45.52
	Water Flow	ℓ/s	0.66	0.78	0.90	1.01	0.69	0.82	0.94	1.06	0.73	0.86	0.99	1.12
6	Total Capacity	kW	13.42	16.09	18.88	21.47	14.10	16.89	19.84	22.54	14.80	17.74	20.86	23.67
	Sensible heat Capacity	kW	10.32	12.22	14.58	14.40	10.90	12.90	15.40	15.20	11.52	13.63	16.29	16.05
	Pressure Drop	kPa	12.77	18.90	25.63	32.02	14.30	20.30	27.90	35.06	15.90	22.40	30.67	38.22
	Water Flow	ℓ/s	0.58	0.69	0.81	0.92	0.61	0.73	0.85	0.97	0.64	0.76	0.90	1.02
7	Total Capacity	kW	11.44	14.20	17.02	19.39	12.04	14.90	17.87	20.34	12.68	15.64	18.78	21.35
	Sensible heat Capacity	kW	9.43	11.37	13.74	13.50	9.97	12.01	14.53	14.25	10.56	12.70	15.37	15.05
	Pressure Drop	kPa	9.79	14.67	20.30	26.62	11.30	15.90	22.40	29.11	11.95	17.37	24.56	31.70
	Water Flow	ℓ/s	0.49	0.61	0.73	0.83	0.52	0.64	0.77	0.87	0.54	0.67	0.81	0.92
8	Total Capacity	kW	9.66	12.33	15.16	17.24	10.17	12.98	15.93	18.04	10.72	13.66	16.76	18.94
	Sensible heat Capacity	kW	8.61	10.54	12.92	12.60	9.11	11.15	13.67	13.29	9.64	11.80	14.46	14.05
	Pressure Drop	kPa	7.00	11.37	16.32	21.54	8.10	13.13	17.73	23.30	8.58	13.39	19.45	25.84
	Water Flow	ℓ/s	0.42	0.53	0.65	0.74	0.44	0.56	0.69	0.78	0.46	0.59	0.72	0.81
9	Total Capacity	kW	8.14	10.63	13.46	15.19	8.58	11.20	14.13	15.93	9.06	11.81	14.89	16.72
	Sensible heat Capacity	kW	7.82	9.74	12.16	11.75	8.27	10.31	12.85	12.42	8.75	10.92	13.61	13.13
	Pressure Drop	kPa	5.20	8.47	13.19	16.23	5.79	9.81	14.31	17.58	6.06	10.40	15.72	19.21
	Water Flow	ℓ/s	0.35	0.46	0.58	0.65	0.37	0.48	0.61	0.69	0.39	0.51	0.64	0.72

Note: Based on chilled water temperature rise 6°C.

40LMA080

Entering Water Temp.	Air Flow	ℓ/s	1100				1250				1400			
	Entering Air Temperature													
	Dry Bulb	°C	21	23	25	27	21	23	25	27	21	23	25	27
	Wet Bulb	°C	16	17	18	19	16	17	18	19	16	17	18	19
5	Total Capacity	kW	20.45	23.81	27.27	30.83	21.34	24.88	28.51	32.23	21.71	25.31	29.02	32.80
	Sensible Heat Capacity	kW	14.56	16.92	19.85	19.75	15.26	17.75	20.84	20.72	15.56	18.10	21.25	21.12
	Pressure Drop	kPa	33.80	44.60	56.50	70.60	36.00	48.40	62.20	77.50	37.74	50.78	64.83	85.25
	Water Flow	ℓ/s	0.88	1.02	1.17	1.32	0.92	1.07	1.22	1.38	0.93	1.09	1.25	1.41
6	Total Capacity	kW	17.86	21.28	24.78	28.16	18.65	22.21	25.89	29.42	18.97	22.60	26.35	29.93
	Sensible Heat Capacity	kW	13.37	15.76	18.71	18.55	14.02	16.54	19.65	19.46	14.30	16.86	20.03	19.84
	Pressure Drop	kPa	26.61	36.00	47.44	59.81	28.50	38.40	51.52	65.20	29.40	40.16	53.60	71.72
	Water Flow	ℓ/s	0.77	0.91	1.06	1.21	0.80	0.95	1.11	1.26	0.81	0.97	1.13	1.29
7	Total Capacity	kW	15.45	18.77	22.29	25.46	16.12	19.60	23.30	26.59	16.39	19.94	23.72	27.06
	Sensible Heat Capacity	kW	12.27	14.63	17.59	17.36	12.88	15.37	18.48	18.22	13.13	15.67	18.85	18.58
	Pressure Drop	kPa	19.90	28.79	38.40	49.35	21.90	30.85	41.46	53.60	21.90	31.60	43.40	56.50
	Water Flow	ℓ/s	0.66	0.81	0.96	1.09	0.69	0.84	1.00	1.14	0.70	0.86	1.02	1.16
8	Total Capacity	kW	13.14	16.34	19.89	22.76	13.73	17.07	20.79	23.76	13.97	17.37	21.15	24.17
	Sensible Heat Capacity	kW	11.22	13.56	16.54	16.22	11.79	14.24	17.38	17.02	12.02	14.53	17.73	17.36
	Pressure Drop	kPa	15.00	21.90	31.60	40.70	16.11	24.10	33.80	43.40	16.60	24.86	34.78	45.80
	Water Flow	ℓ/s	0.57	0.70	0.86	0.98	0.59	0.73	0.89	1.02	0.60	0.75	0.91	1.04
9	Total Capacity	kW	11.04	14.16	17.64	20.05	11.57	14.80	18.45	20.93	11.78	15.06	18.78	21.30
	Sensible Heat Capacity	kW	10.22	12.58	15.54	15.09	10.74	13.22	16.33	15.85	10.96	13.48	16.66	16.16
	Pressure Drop	kPa	10.80	16.60	25.50	31.69	11.89	18.20	27.40	33.94	12.10	18.76	28.30	36.00
	Water Flow	ℓ/s	0.48	0.61	0.76	0.86	0.50	0.64	0.79	0.90	0.51	0.65	0.81	0.92

Note: Based on chilled water temperature rise 6°C.

Hot Water Coils

40LMA024, 1 Row, 2 Circuits

Air Flow	Face Velocity	Water ΔT °C	Water Temp. °C	50		60		70		80	
			Air Temp. (D/B) °C	19	21	19	21	19	21	19	21
400 ℓ/s	2.04 m/s	10	Heating kW	3.50	3.14	5.44	5.08	7.40	7.04	9.38	9.01
			Pressure Drop kPa	0.62	0.51	1.30	1.15	2.17	1.98	3.21	2.99
			Water Flow ℓ/s	0.08	0.08	0.13	0.12	0.18	0.17	0.23	0.22
		15	Heating kW	2.27	1.88	4.36	4.00	6.33	5.97	8.31	7.96
			Pressure Drop kPa	0.13	0.09	0.44	0.38	0.81	0.73	1.27	1.18
			Water Flow ℓ/s	0.04	0.03	0.07	0.06	0.10	0.10	0.14	0.13
450 ℓ/s	2.29 m/s	10	Heating kW	3.74	3.36	5.83	5.44	7.94	7.55	10.06	9.67
			Pressure Drop kPa	0.70	0.58	1.46	1.30	2.45	2.24	3.64	3.39
			Water Flow ℓ/s	0.09	0.08	0.14	0.13	0.19	0.18	0.25	0.24
		15	Heating kW	2.44	2.02	4.66	4.28	6.78	6.39	8.91	8.53
			Pressure Drop kPa	0.15	0.11	0.49	0.42	0.91	0.82	1.44	1.33
			Water Flow ℓ/s	0.04	0.03	0.08	0.07	0.11	0.10	0.15	0.14
500 ℓ/s	2.48 m/s	10	Heating kW	3.90	3.50	6.09	5.69	8.30	7.90	10.52	10.12
			Pressure Drop kPa	0.75	0.62	1.58	1.40	2.66	2.43	3.95	3.68
			Water Flow ℓ/s	0.09	0.08	0.15	0.14	0.20	0.19	0.26	0.25
		15	Heating kW	2.56	2.11	4.86	4.47	7.08	6.68	9.32	8.91
			Pressure Drop kPa	0.17	0.12	0.53	0.45	0.99	0.89	1.55	1.44
			Water Flow ℓ/s	0.04	0.03	0.08	0.07	0.12	0.11	0.15	0.15

40LMA040, 1 Row, 2 Circuits

Air Flow	Face Velocity	Water ΔT °C	Water Temp. °C	50		60		70		80	
			Air Temp. (D/B) °C	19	21	19	21	19	21	19	21
600 ℓ/s	2.13 m/s	10	Heating kW	6.26	5.68	9.41	8.82	12.58	11.99	15.75	15.16
			Pressure Drop kPa	2.48	2.08	4.89	4.36	7.94	7.29	11.55	10.79
			Water Flow ℓ/s	0.15	0.14	0.23	0.21	0.31	0.29	0.39	0.37
		15	Heating kW	4.72	4.12	7.89	7.30	11.07	10.48	14.26	13.68
			Pressure Drop kPa	0.75	0.59	1.77	1.54	3.11	2.82	4.73	4.39
			Water Flow ℓ/s	0.08	0.07	0.13	0.12	0.18	0.17	0.23	0.22
700 ℓ/s	2.42 m/s	10	Heating kW	6.74	6.11	10.14	9.51	13.57	12.93	17.00	16.36
			Pressure Drop kPa	2.82	2.37	5.59	4.98	9.09	8.34	13.24	12.37
			Water Flow ℓ/s	0.16	0.15	0.25	0.23	0.33	0.32	0.42	0.40
		15	Heating kW	5.07	4.43	8.48	7.85	11.93	11.30	15.38	14.75
			Pressure Drop kPa	0.85	0.68	2.01	1.76	3.55	3.22	5.41	5.02
			Water Flow ℓ/s	0.08	0.07	0.14	0.13	0.19	0.18	0.25	0.24
800 ℓ/s	2.59 m/s	10	Heating kW	7.00	6.34	10.54	9.88	14.10	13.44	17.67	17.01
			Pressure Drop kPa	3.01	2.53	5.98	5.33	9.73	8.93	14.18	13.25
			Water Flow ℓ/s	0.17	0.15	0.26	0.24	0.34	0.33	0.43	0.42
		15	Heating kW	5.26	4.59	8.81	8.15	12.39	11.73	15.98	15.32
			Pressure Drop kPa	0.91	0.72	2.15	1.87	3.79	3.44	5.79	5.38
			Water Flow ℓ/s	0.08	0.07	0.14	0.13	0.20	0.19	0.26	0.25

Hot Water Coils

40LMA060, 1 Row, 2 Circuits

Air Flow	Face Velocity	Water ΔT °C	Water Temp. °C	50		60		70		80	
			Air Temp. (D/B) °C	19	21	19	21	19	21	19	21
800 ℓ/s	2.86 m/s	10	Heating kW	8.62	7.82	12.89	12.09	17.18	16.38	21.47	20.68
			Pressure Drop kPa	4.85	4.09	9.53	8.50	15.42	14.16	22.40	20.94
			Water Flow ℓ/s	0.21	0.19	0.31	0.29	0.42	0.40	0.53	0.51
		15	Heating kW	6.58	5.79	10.86	10.07	15.18	14.39	19.51	18.72
			Pressure Drop kPa	1.50	1.20	3.47	3.03	6.06	5.51	9.21	8.55
			Water Flow ℓ/s	0.11	0.09	0.18	0.16	0.25	0.23	0.32	0.31
900 ℓ/s	2.87 m/s	10	Heating kW	8.64	7.84	12.91	12.11	17.21	16.41	21.52	20.72
			Pressure Drop kPa	4.86	4.10	9.56	8.53	15.47	14.21	22.48	21.01
			Water Flow ℓ/s	0.21	0.19	0.31	0.29	0.42	0.40	0.53	0.51
		15	Heating kW	6.59	5.80	10.89	10.09	15.21	14.41	19.55	18.75
			Pressure Drop kPa	1.50	1.20	3.48	3.04	6.08	5.53	9.24	8.58
			Water Flow ℓ/s	0.11	0.09	0.18	0.16	0.25	0.23	0.32	0.31
1000 ℓ/s	2.97 m/s	10	Heating kW	8.80	7.98	13.16	12.34	17.54	16.72	21.93	21.12
			Pressure Drop kPa	5.03	4.24	9.88	8.82	16.01	14.70	23.26	21.74
			Water Flow ℓ/s	0.21	0.19	0.32	0.30	0.43	0.41	0.54	0.52
		15	Heating kW	6.71	5.90	11.09	10.28	15.50	14.69	19.92	19.11
			Pressure Drop kPa	1.55	1.24	3.60	3.14	6.29	5.72	9.56	8.87
			Water Flow ℓ/s	0.11	0.10	0.18	0.17	0.25	0.24	0.33	0.31

40LMA080, 1 Row, 2 Circuits

Air Flow	Face Velocity	Water ΔT °C	Water Temp. °C	50		60		70		80	
			Air Temp. (D/B) °C	19	21	19	21	19	21	19	21
1100 ℓ/s	2.83 m/s	10	Heating kW	11.72	10.67	17.28	16.23	22.86	21.81	28.45	27.41
			Pressure Drop kPa	10.52	8.92	20.23	18.10	32.37	29.78	46.72	43.70
			Water Flow ℓ/s	0.28	0.26	0.42	0.39	0.56	0.53	0.70	0.67
		15	Heating kW	9.20	8.15	14.81	13.77	20.44	19.39	26.06	25.02
			Pressure Drop kPa	3.41	2.76	7.57	6.65	12.97	11.81	19.46	18.09
			Water Flow ℓ/s	0.15	0.13	0.24	0.22	0.33	0.32	0.43	0.41
1250 ℓ/s	2.86 m/s	10	Heating kW	11.78	10.73	17.38	16.32	22.99	21.94	28.62	27.57
			Pressure Drop kPa	10.63	9.01	20.44	18.29	32.72	30.09	47.22	44.17
			Water Flow ℓ/s	0.29	0.26	0.42	0.40	0.56	0.54	0.70	0.68
		15	Heating kW	9.26	8.20	14.90	13.85	20.56	19.51	26.22	25.17
			Pressure Drop kPa	3.45	2.79	7.65	6.72	13.10	11.94	19.66	18.29
			Water Flow ℓ/s	0.15	0.13	0.24	0.22	0.33	0.32	0.43	0.41
1400 ℓ/s	2.89 m/s	10	Heating kW	11.85	10.79	17.48	16.42	23.13	22.07	28.78	27.73
			Pressure Drop kPa	10.74	9.10	20.65	18.48	33.06	30.41	47.72	44.63
			Water Flow ℓ/s	0.29	0.26	0.42	0.40	0.56	0.54	0.71	0.68
		15	Heating kW	9.31	8.24	14.98	13.92	20.67	19.62	26.37	25.32
			Pressure Drop kPa	3.48	2.82	7.73	6.79	13.24	12.06	19.87	18.48
			Water Flow ℓ/s	0.15	0.13	0.24	0.23	0.34	0.32	0.43	0.41

Sound Pressure Levels

Coil # of Row	Model	Speed	Octave Band Centre								
			63	125	250	500	1000	2000	4000	8000	dB(A)
4 Row	40LMA024	H	23.2	30.5	40.1	41.3	46.7	42.1	38.4	28.4	49.8
		M	21.7	29.1	36.6	38.1	43.2	39.4	34.1	24.6	46.5
		L	18.5	27.3	34.9	35.4	40.7	34.7	30.1	20.5	43.7
	40LMA040	H	20.8	37.1	46.0	47.0	48.5	43.9	42.4	30.9	53.2
		M	19.5	35.3	45.1	45.7	47.5	41.7	40.2	28.9	51.9
		L	17.4	32.6	44.1	44.7	45.6	40.6	38.6	26.8	50.5
	40LMA060	H	21.9	34.7	45.3	47.6	47.3	44.8	41.4	31.3	52.9
		M	21.6	34.1	44.5	47.0	46.4	43.9	40.5	36.7	52.2
		L	18.3	32.7	43.6	46.0	45.3	42.8	39.3	28.8	51.0
	40LMA080	H	28.1	37.2	43.6	46.0	49.4	46.2	44.2	35.1	53.6
		M	26.6	35.4	41.9	44.9	48.6	44.5	42.3	31.4	52.3
		L	23.2	31.7	41.5	43.7	46.8	42.5	39.8	28.7	50.6
6 Row	40LMA024	H	25.2	31.7	39.5	41.8	45.0	41.9	37.6	27.0	49.0
		M	20.7	29.5	38.4	40.9	42.9	38.5	34.6	23.1	47.0
		L	14.4	27.4	33.8	36.4	40.5	31.2	31.5	20.1	43.3
	40LMA040	H	20.3	37.0	46.7	47.1	47.7	41.4	40.7	28.4	52.7
		M	18.7	34.8	44.2	44.8	46.8	39.9	38.6	25.8	51.0
		L	15.5	31.5	43.0	43.8	44.2	37.2	37.3	23.2	49.2
	40LMA060	H	22.5	32.9	44.7	46.5	45.4	44.4	38.9	28.9	51.7
		M	20.3	31.6	43.2	45.9	44.8	43.0	38.0	28.3	50.7
		L	18.2	27.9	42.0	44.6	43.3	42.7	36.2	26.3	49.5
	40LMA080	H	25.8	35.4	48.6	49.0	49.0	44.6	40.8	32.1	54.4
		M	24.3	34.3	45.8	46.6	47.6	43.8	40.4	29.8	52.6
		L	21.3	32.8	43.9	45.3	45.8	42.7	37.9	28.5	50.9

Note: Sound measurement in accordance with JIS B 8616:2006 Standard (1.5 below the unit bottom).

Electrical Data

Model	Voltage	Phase	Hz	Operating Volts *		Fan	
				Max.	Min.	LRA	RLA
40LMA024	240	Single	50	253	207	6.35	2.46
40LMA040						7.76	4.40
40LMA060						12.1	4.55
40LMA080						21.0	7.40

LRA: Locked Rotor Amps

FLA: Full Load Amps

* Permissible limits of the voltage range at which the unit will operate satisfactorily.

Furnish and install fan coil units in the location and manner shown in IOM. Units shall be suitable for use with 240V-1Ph-50Hz electrical supply.

- **COILS**

Coils shall be rated in accordance with ARI standard 410. The coils shall be tested at 2760kPa air pressure while submerged in water. The coils shall be equipped with manual air bleed/vent valve. The base units shall be completed with 4-row chilled water coil (or optional 6-row) which equipped with 1" copper connections for both supply and return line. These coils shall be constructed with lanced sine wave aluminium plate fins mechanically bonded to 3/8" (9.5mm) copper tubing with all joints brazed. Optional 1-row hot water heating coil with 1/2" copper connection is fitted inside the unit attached to the Chilled Water coil. This Heating Coil can only be supplied in conjunction with the Chilled Water Coil. This coil shall be constructed with double wavy aluminium plate fins mechanically bonded to 1/2" (12.7mm) copper tubing with all joints brazed. All coils shall be with a nominal 472 fins per meter with copper headers. Coils connection can be chosen for either left or right connection.

- **CASING**

Unit casing construction shall be single skin 1mm thick galvanized steel with internal lined with 25.4mm Polyurethane laminated with aluminium foil. Condensate drain pan shall be painted galvanized steel insulated with 6.4mm thick closed cell polyethylene foam and pitch for positive drainage with unit level. Optional unpainted Stainless steel drain pan with PE insulation is also available. The drain pan connection shall be 3/4" B.S.P male.

- **FAN**

Fan(s) shall be DIDW forward curved centrifugal type direct driven by a resiliently mounted permanent split capacitor motor.

- **SERVICEABILITY**

The unit shall have a side access panel at coil side providing access to the fan motor and drain tray. The electrical terminal block (including capacitor) shall be mounted on the unit exterior opposite coil side.

- **SOUND**

The unit shall be of quiet operation suitable for typical commercial operation.

- **FILTER ACCESSORY**

The base units shall only be with return air spigot without filter. Optional air filter frame shall be fitted to the unit return air spigot. This add-on filter track shall be capable of receiving the standard 12mm thick frame with EU2 grade media or optional 25mm with higher EU3 grade media. The filter shall be able to be fitted in either left or right hand position (following the coils connection) with side withdrawal of filter as well as front withdrawal.



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